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| APPLICATION NO.                       | FILING DATE       | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------|-------------------|----------------------|---------------------|------------------|
| 10/797,897                            | 03/10/2004        | Ashish M. Sukhadia   | C51757-0450         | 5059             |
| 35395                                 | 7590 06/16/2005   |                      | EXAM                | INER             |
| WOMBLE CARLYLE SANDRIDGE & RICE, PPLC |                   |                      | CHOI, LING SIU      |                  |
| CHEVRON F                             | PHILLIPS CHEMICAL | COMPANY LP           |                     |                  |
| P.O. BOX 7037                         |                   | ART UNIT             | PAPER NUMBER        |                  |
| ATI ANTA GA 30357-0037                |                   | 1713                 |                     |                  |

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|   | Application No.  | Applicant(s)               |  |  |  |  |
|---|--|----------------------------|--|--|--|--|
| 0.57  | 10/797,897   | SUKHADIA ET AL.            |  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit                   |  |  |  |  |
|   | Ling-Siu Choi  | 1713                       |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply   |  |                            |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |                            |  |  |  |  |
| Status  |  |                            |  |  |  |  |
| 1) Responsive to communication(s) filed on  |  |                            |  |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ This  |  |                            |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |                            |  |  |  |  |
| closed in accordance with the practice under E  | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                                |                            |  |  |  |  |
| Disposition of Claims   |  |                            |  |  |  |  |
| 4)⊠ Claim(s) <u>1-45</u> is/are pending in the application.   |  |                            |  |  |  |  |
| 4a) Of the above claim(s) <u>14-45</u> is/are withdrawn from consideration.   |  |                            |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |                            |  |  |  |  |
| 6) Claim(s) <u>1-13</u> is/are rejected.  |  |                            |  |  |  |  |
|   | 7) Claim(s) is/are objected to.  |                            |  |  |  |  |
| 8) Claim(s) are subject to restriction and/o  | r election requirement.  |                            |  |  |  |  |
| Application Papers  |  |                            |  |  |  |  |
| 9)☐ The specification is objected to by the Examine   | r.   |                            |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |  |                            |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |                            |  |  |  |  |
|   | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). |                            |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex   | aminer. Note the attached Office   | Action or form P10-152.    |  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |                            |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  |  |                            |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |                            |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |  |                            |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |                            |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |                            |  |  |  |  |
| Attachment(s)   |  |                            |  |  |  |  |
| 1) Notice of References Cited (PTO-892)   | 4) Interview Summary   | (PTO-413)                  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail D   |                            |  |  |  |  |
| <ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date 11/1 &amp; 8/5/2004.</li> </ol>   | 6) Other:  | atom Approaudit (r 10-102) |  |  |  |  |

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#### **DETAILED ACTION**

#### Election/Restriction

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-13, drawn to a polymer or copolymer of ethylene having Mw/Mn
     ≤ 20 and a film clarity of 1 mil film ≤ about 30%, classified in class 526,
     subclass 348+.
  - II. Claims 14-23, drawn to a polymer or copolymer of ethylene having MI from about 0.01 to about 10 dg/min and a film clarity of 1 mil film ≤ about 30%, classified in class 526, subclass 348+.
  - III. Claims 24-33, drawn to a polymer or copolymer of ethylene having HLMI from about 8 to about 180 dg/min and a film clarity of 1 mil film ≤ about 30%, classified in class 526, subclass 348+.
  - IV. Claims 34-45, drawn to a polymer or copolymer of ethylene having a film haze of a 1 mil film at least about 60% and HLMI from about 8 to about 180 dg/min, classified in class 526, subclass 348+.
- 2. The inventions are distinct, each from the other because of the following reasons:

  Inventions I, II, III, and IV are unrelated. Inventions are unrelated if it can be
  shown that they are not disclosed as capable of use together and they have different
  modes of operation, different functions, or different effects (MPEP '806.04, MPEP
  '808.01). In the instant case the different inventions relate to an ethylene polymer

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[Mw/Mn ≤ 20 / a film clarity of 1 mil film ≤ about 30%]; an ethylene polymer [MI from about 0.01 to about 10 dg/min / a film clarity of 1 mil film ≤ about 30]; an ethylene polymer [HLMI from about 8 to about 180 dg/min / a film clarity of 1 mil film ≤ about 30%]; an ethylene polymer [a film haze of a 1 mil film at least about 60% / HLMI from about 8 to about 180 dg/min].

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- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 4. During a telephone conversation with Mr. David E. Wigley on January 14, 2005, a provisional election was made with traverse to prosecute the invention of Group I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-45 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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### Claim Objections

6. Claims 1-13 are objected to because of the following informalities: (a) claim 1, line 1, "A polymer or copolymer of ethylene" is suggested to be changed to --A polymer of ethylene-- or --A homopolymer or copolymer of ethylene-- because a polymer is a general term to represent a homopolymer or a copolymer and (b) claims 2-13, line 1, "The polymer or copolymer of ethylene" is suggested to be changed to --The polymer of ethylene--or --The homopolymer or copolymer of ethylene--

Appropriate correction is required.

### Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Hazlitt et al. 95,370,940).

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| A polymer of ethylene having   |             |  |  |  |
|--------------------------------|-------------|--|--|--|
| a polydispersity index         | ≤ about 20  |  |  |  |
| a film clarity of a 1 mil film | ≤ about 30% |  |  |  |

(summary of claim 1)

Hazlitt et al. disclose a film of thermoplastic ethylene interpolymer which has a density of about 0.935 g/ml or less,  $I_{10}/I_2$  of at least about 8,  $I_2$  of from about 0.1 to about 4 g/10 min; Mw/Mn of 4.16 - 6.20, and a film clarity of 0.25 - 29.70 (abstract; Examples 1-9; Tables II and VII; claims 1-3). Thus, the present claims are anticipated by the disclosure of Hazlitt et al.

9. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Hazlitt et al. 95,370,940).

Hazlitt et al. disclose a film of thermoplastic ethylene interpolymer which has Mw/Mn of 4.16 - 6.20, a film haze of 64.83, and a film clarity of 0.25-29.70 (Example 2; Tables II and VII; claim 1). Thus, the present claim is anticipated by the disclosure of Hazlitt et al.

# Claim Rejections - 35 USC § 102/103

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 1-13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Saudemont et al. (US 6,239,059).

Saudemont et al. disclose a copolymer of ethylene and hexene in the presence of a catalyst containing Et(Ind)<sub>2</sub>ZrCl<sub>2</sub> on a solid support which is obtained by contacting a silica with dibutoxyaluminoxytriethoxysilane and then with (NH<sub>4</sub>)<sub>2</sub>SiF<sub>6</sub> and Triisobutylaluminum (TiBA) (Examples 1 and 34). However, Saudemont et al. are silent on the specific properties of the resulting copolymer of ethylene and hexene. In view of substantially identical process to prepare the copolymer of ethylene and hexene, the copolymer of ethylene and hexene would possess the claimed properties. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to applicants to show otherwise. *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977); *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

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#### Conclusion

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner=s supervisor, David Wu, can be reach on 571-272-1114.

LING-SUI CHOI PRIMARY EXAMINER

4 c. eda'

June 5, 2005